

**Annual**



**Report**

**RIDOT TMC Incident Statistics  
1/1/2009 To 12/31/2009**

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is done quarterly. By making these statistics available to you, we hope that you can learn more about the program and understand the benefit of the services we provide to the Rhode Island motoring public.

The types of incidents tabulated in this annual summary include disabled vehicles, debris on the roadway, emergency roadwork, vehicle accidents, and vehicle rollovers. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

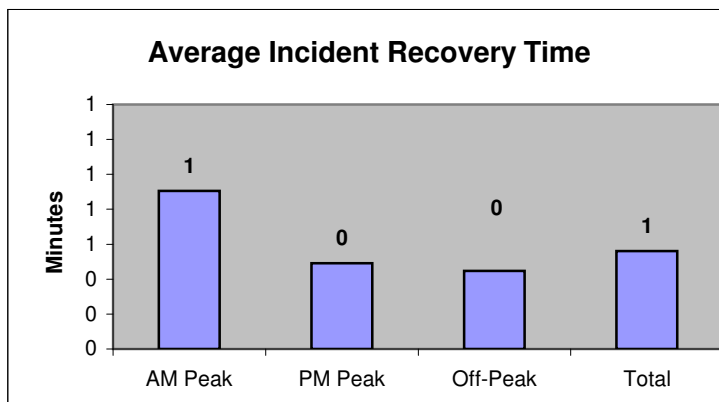
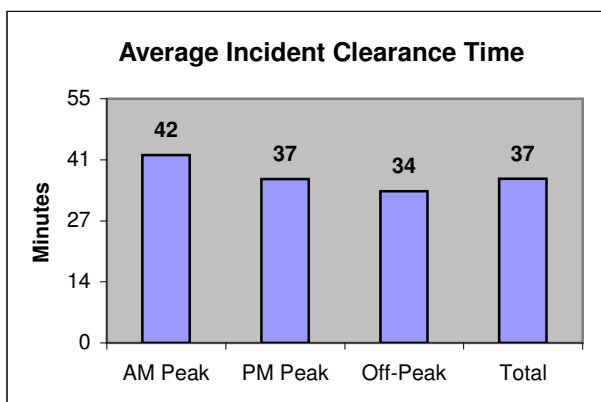
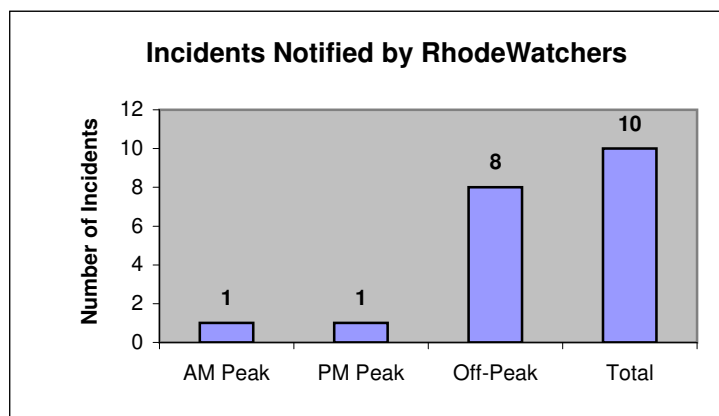
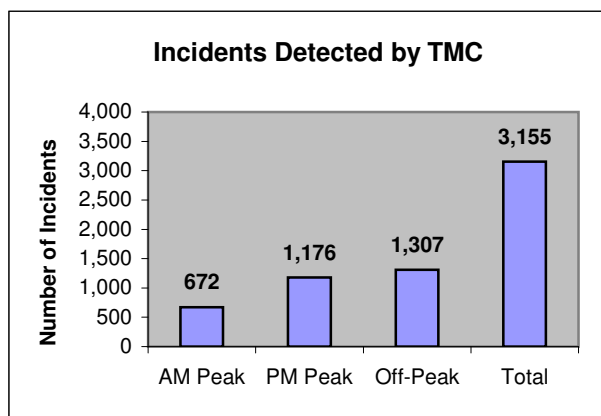
# RIDOT TMC Incident Statistics Report

## 1. Peak Period Incident Statistics\*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	701	1203	1358	3262
Avg. Incident Duration (hr:min)	43	37	35	37
Avg. Incident Clearance Time (hr:min)	42	37	34	37
Avg. Incident Recovery Time (hr:min)	1	0	0	1
# Detected by TMC Operators (CCVE)	278	562	571	1411
# Detected by TMC, State Police	394	614	736	1744
# Notified by RhodeWatchers	1	1	8	10
# of Messages Posted VMS	60	93	144	297
# of Messages Posted DMS	297	426	630	1353
# of Messages Posted HAR	206	267	352	825
# of Messages posted Web	618	1158	1192	2968
Avg. Delay Cost**	\$182,578	\$157,959	\$146,324	\$158,406
Total Delay Cost	\$127,987,052	\$190,024,187	\$198,708,367	\$516,719,606

\* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

\*\* Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



*Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways*

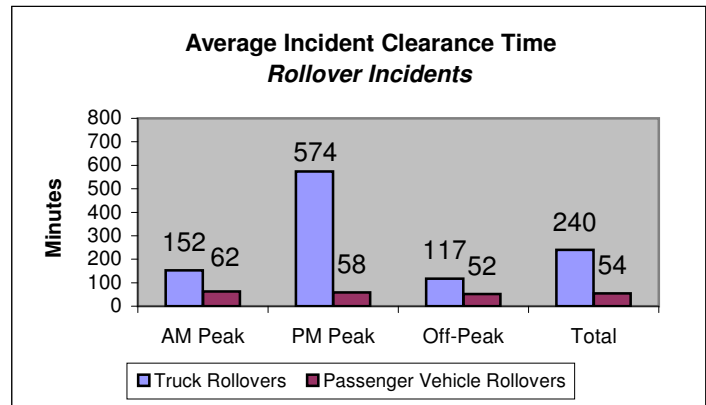
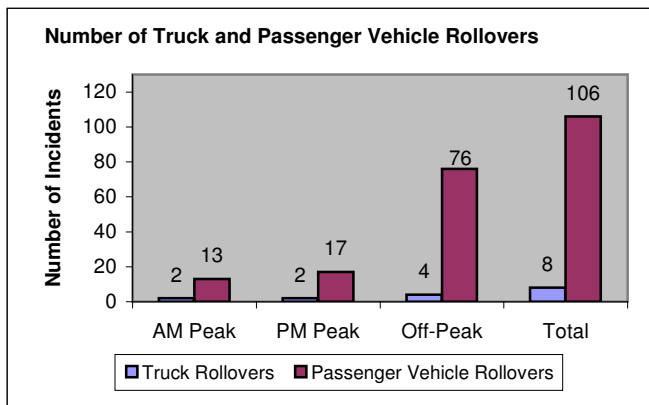
**Incident Clearance Time** is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

**Incident Recovery Time** is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.

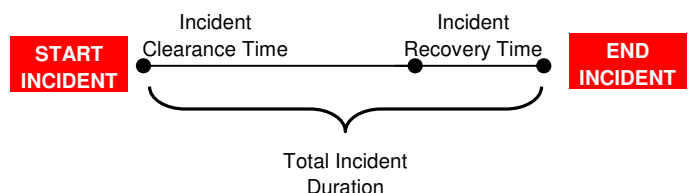
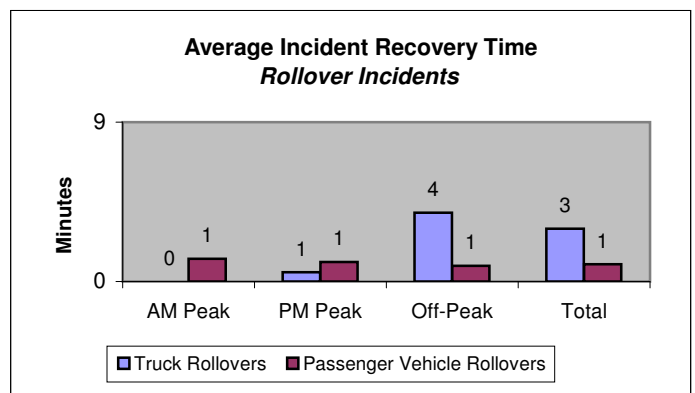
## 2. Rollover Incident Statistics\*

VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	2	2	4	8	13	17	76	106
Avg. Incident Duration (min)	152	575	121	242	64	59	53	55
Avg. Incident Clearance Time (min)	152	574	117	240	62	58	52	54
Avg. Incident Recovery Time (min)	0	1	4	3	1	1	1	1

\* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday



Roadway	Exit Number	Number Of Rollovers
Airport Connector Westbound	N/A	1
Interstate 195 Eastbound	3	1
Interstate 195 Eastbound	6	1
Interstate 195 Eastbound	4	1
Interstate 195 Westbound	N/A	1
Interstate 195 Westbound	2	1
Interstate 195 Westbound	2	1
Interstate 195 Westbound	2	1
Interstate 295 Northbound	8A	1
Interstate 295 Northbound	5	1
Interstate 295 Northbound	10	1
Interstate 295 Northbound	10	1
Interstate 295 Northbound	8A	1
Interstate 295 Northbound	10	1
Interstate 295 Northbound	8B	1
Interstate 295 Northbound	N/A	1
Interstate 295 Northbound	10	1
Interstate 295 Northbound	7B	1
Interstate 295 Northbound	10	1
Interstate 295 Northbound	8A	1
Interstate 295 Northbound	6	1
Interstate 295 Southbound	3A	1
Interstate 295 Southbound	9A	1
Interstate 295 Southbound	9A	1
Interstate 295 Southbound	9A	1



Interstate 295 Southbound	7A	1
Interstate 295 Southbound	11	1
Interstate 295 Southbound	6	1
Interstate 295 Southbound	9A	1
Interstate 295 Southbound	5	1
Interstate 295 Southbound	10	1
Interstate 395 Northbound	N/A	1
Interstate 95 Northbound	22B	1
Interstate 95 Northbound	22B	1
Interstate 95 Northbound	24	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	4	1
Interstate 95 Northbound	29	1
Interstate 95 Northbound	25	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	2	1
Interstate 95 Northbound	9	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	21	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	8A	1
Interstate 95 Northbound	29	1
Interstate 95 Northbound	29	1
Interstate 95 Northbound	24	1
Interstate 95 Northbound	10	1
Interstate 95 Northbound	18	1
Interstate 95 Northbound	22A	1
Interstate 95 Northbound	5B	1
Interstate 95 Southbound	5B	1
Interstate 95 Southbound	6A	1
Interstate 95 Southbound	16	1
Interstate 95 Southbound	6A	1
Interstate 95 Southbound	4	1
Interstate 95 Southbound	27	1
Interstate 95 Southbound	18	1
Interstate 95 Southbound	30	1
Interstate 95 Southbound	27	1
Interstate 95 Southbound	14	1
Interstate 95 Southbound	12A	1
Interstate 95 Southbound	25	1
Interstate 95 Southbound	7	1
Interstate 95 Southbound	20	1
Interstate 95 Southbound	19	1
Interstate 95 Southbound	21	1
Interstate 95 Southbound	18	1
Interstate 95 Southbound	3B	1
Interstate 95 Southbound	24	1
Route 1 Southbound	N/A	1
Route 1 Southbound	N/A	1
Route 10 Northbound	N/A	1
Route 10 Northbound	N/A	1
Route 10 Northbound	N/A	1
Route 10 Southbound	N/A	1
Route 102 Eastbound	N/A	1
Route 116 Northbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Northbound	N/A	1

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### 3. Incidents by Severity Level

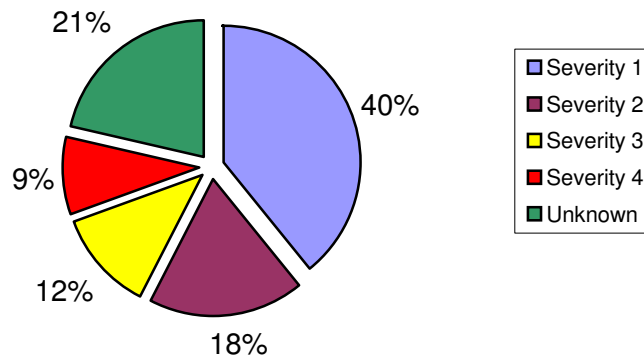
Severity Level*	No. of Incidents
Severity 0	1401
Severity 1	730
Severity 2	342
Severity 3	222
Severity 4	171
Unknown	396
<b>Total</b>	<b>3262</b>

Number of Incidents with a Secondary Incident:

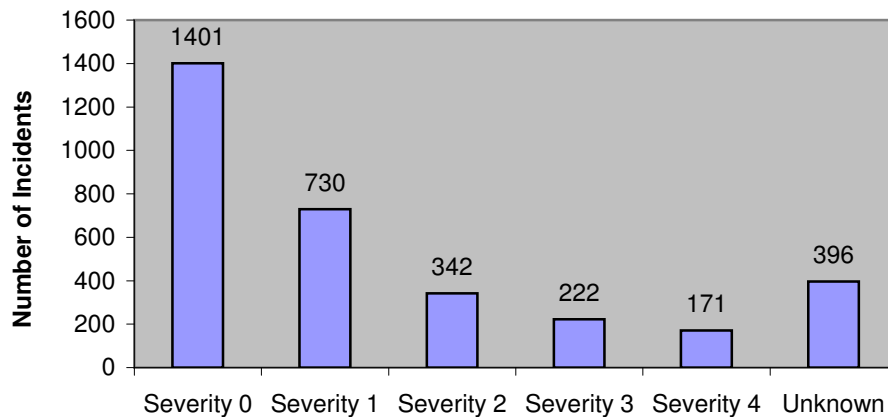
Percentage of Incidents with a Secondary Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

**Percent of Incidents by Severity Level**



**Number of Incidents by Severity Level**



#### \*Definition of Incident Severity Levels:

*Severity 0:* No injuries and no travel lanes blocked

*Severity 1:* 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

*Severity 2:* 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR hazardous materials (HAZMAT) w/ 0 lanes closed

*Severity 3:* 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR  
Hazmat w/ 2/4 lanes closed

*Severity 4:* All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed  
OR Structural damage w/ 1/3, 2/3+ lanes closed

*Unknown:* Incidents without a recorded severity level

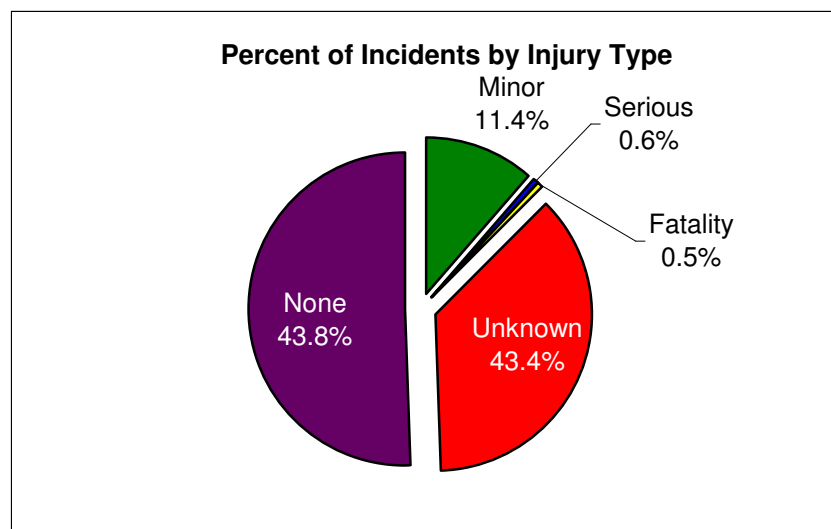
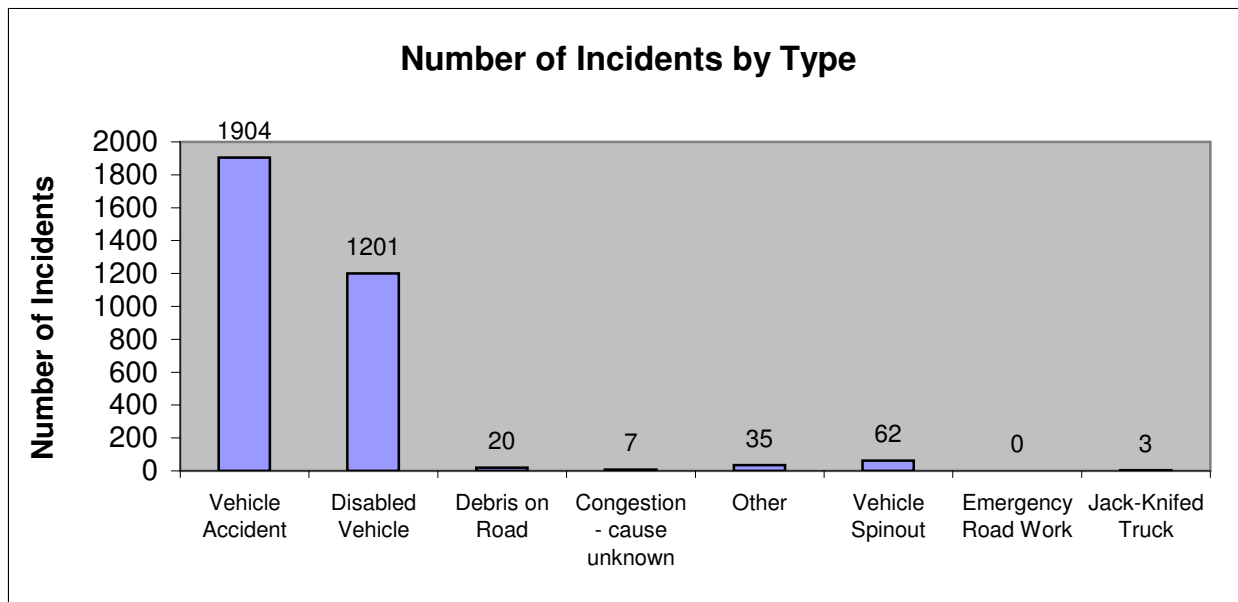
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

#### 4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	1904
Disabled Vehicle	1201
Debris on Road	20
Congestion - cause unknown	7
Other	35
Vehicle Spinout	62
Emergency Road Work	0
Jack-Knifed Truck	3
<i>Total Number of Incidents</i>	<i>3232</i>

#### 5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	372
Serious	18
Fatality	15
Unknown	1212
None	1645
<i>Total</i>	<i>3262</i>



## 6. Incidents by Pavement and Weather Conditions

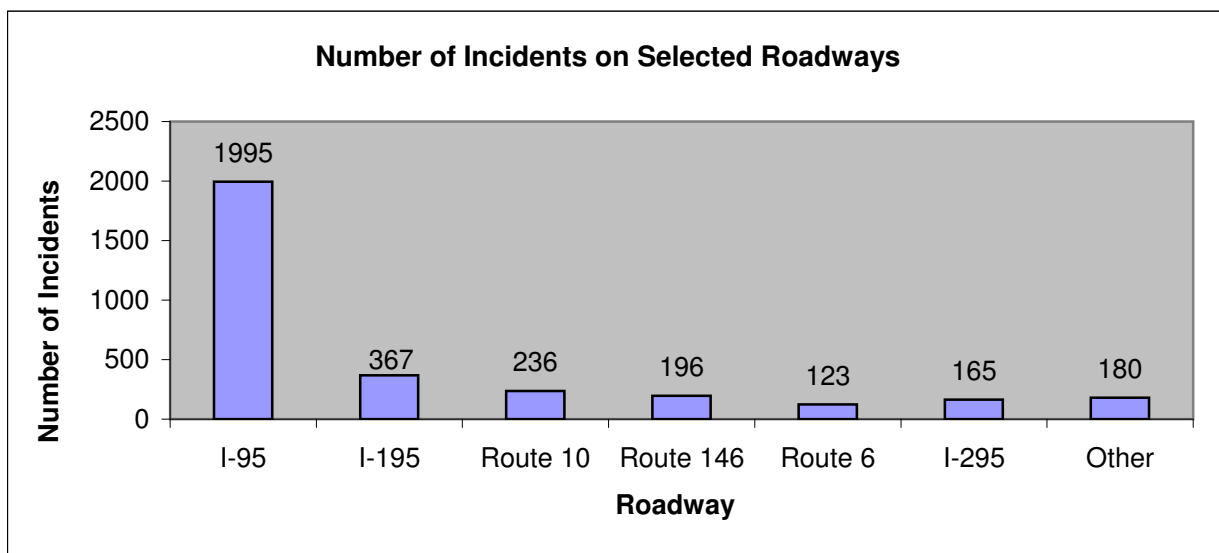
<b>Pavement Condition</b>	<b>No. of Incidents</b>
Dry	2385
Wet	744
Icy	34
Snow-Covered	99
Flooded	0
Other	0
<i>Total</i>	<i>3262</i>
<b>Precipitation</b>	
None	2634
Light-moderate rain falling	475
Heavy rain falling	61
Light-moderate sleet falling	6
Heavy sleet falling	2
Light-moderate snow falling	53
Heavy snow falling	31
<i>Total</i>	<i>3262</i>
<b>Wind</b>	
Calm to Moderate	3134
Moderate to Strong	117
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	1
N/A	10
<i>Total</i>	<i>3262</i>
<b>Visibility</b>	
Clear	2722
Light fog	42
Dense fog	17
Reduced- rain	380
Reduced-snow	50
Poor-heavy rain/sleet	12
Poor-heavy snow	30
Reduced-smoke	0
Other	1
N/A	8
<i>Total</i>	<i>3262</i>



## 7. Incidents Detected by Primary Notifier on Selected Roadways

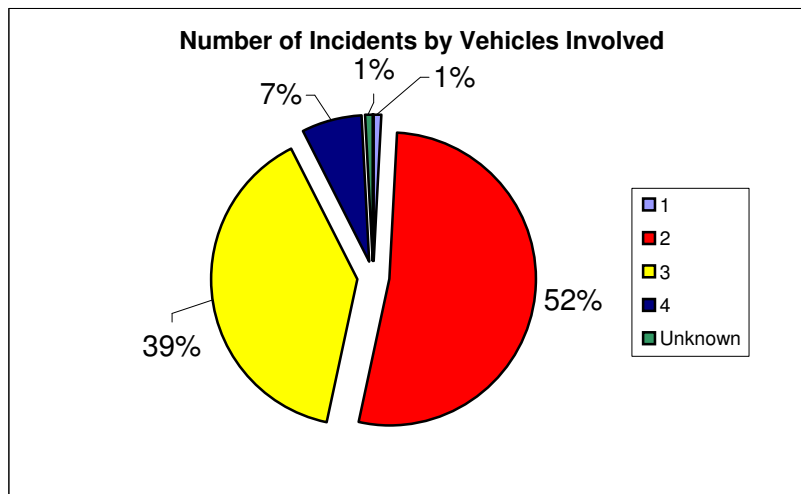
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	181
	State Police Scanner	103
	Local Fire Department	2
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	1
	TMC State Police	0
	Transcom	0
	Other	79
	<i>Total</i>	<i>367</i>
I-95	TMC Operator	987
	State Police Scanner	593
	Local Fire Department	1
	Rhode Watcher	3
	Media/MetroNetworks	5
	Traffic.com	0
	TMC State Police	0
	Transcom	1
	Other	405
	<i>Total</i>	<i>1995</i>
I-295	TMC Operator	26
	State Police Scanner	70
	Local Fire Department	2
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	66
	<i>Total</i>	<i>165</i>

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	92
	State Police Scanner	80
	Local Fire Department	2
	Rhode Watcher	4
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	58
	<i>Total</i>	<i>236</i>
Route 146	TMC Operator	54
	State Police Scanner	78
	Local Fire Department	2
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	1
	Other	62
	<i>Total</i>	<i>197</i>
Route 6	TMC Operator	42
	State Police Scanner	43
	Local Fire Department	2
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	35
	<i>Total</i>	<i>123</i>



## 8. Incidents by Number of Vehicles Involved

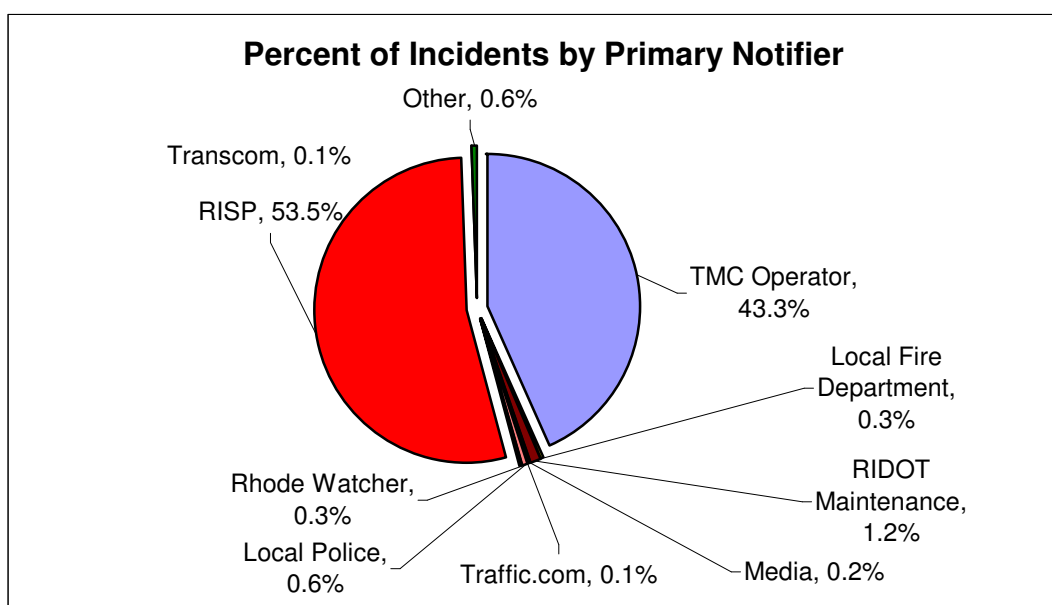
No. of Vehicles Involved	No. of Incidents
1	27
2	1664
3	1240
4	211
5	75
6	10
7	3
8	1
9	1
10+	0
Unknown	30
<b>Total Incidents</b>	<b>3262</b>

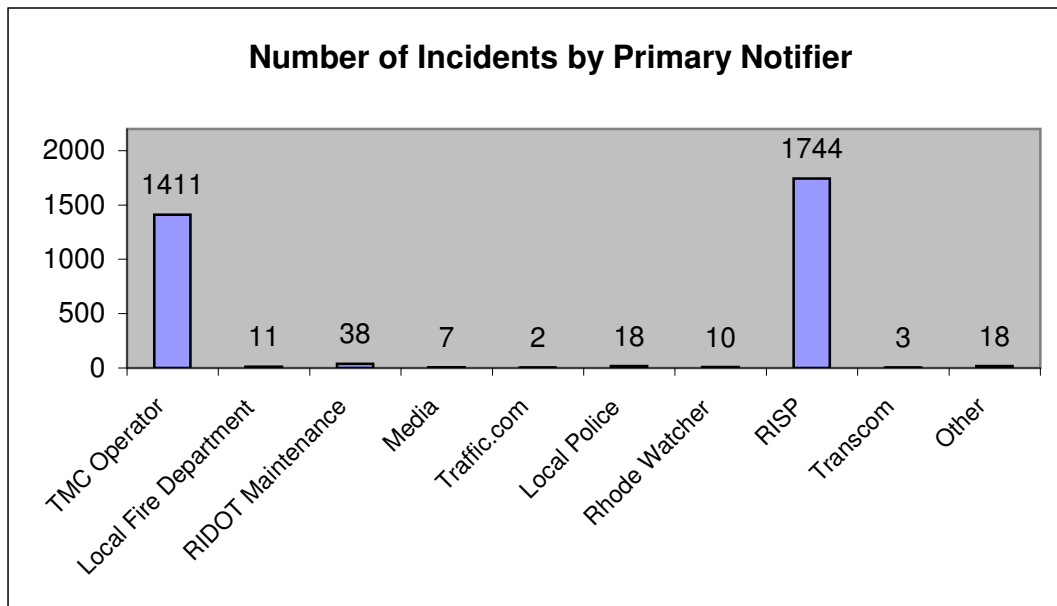


## 9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	1411
Local Fire Department	11
RIDOT Maintenance	38
Media	7
Traffic.com	2
Local Police	18
Rhode Watcher	10
RISP	1744
Transcom	3
Other	18
<b>Total</b>	<b>3262</b>

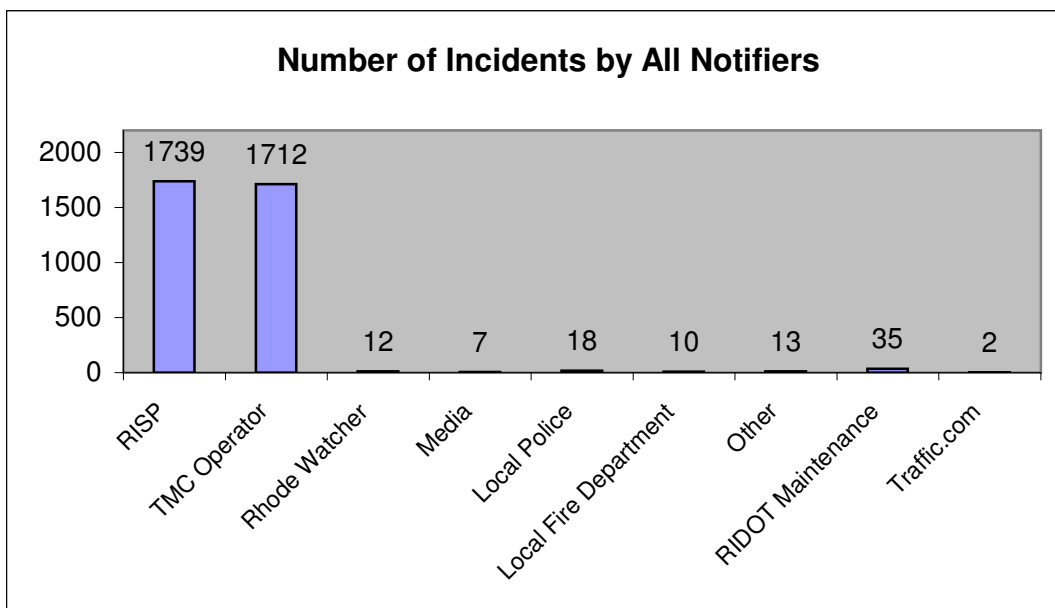
\*First notifier of the incident to TMC





Notifier	No. of Incidents
RISP	1739
TMC Operator	1712
Rhode Watcher	12
Media	7
Local Police	18
Local Fire Department	10
Other	13
RIDOT Maintenance	35
Traffic.com	2
Transcom	3

*Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".*



## 10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	2629	80.59%
Tow	1239	37.98%
Local Fire Department	710	21.77%
EMS	686	21.03%
Local Police	214	6.56%
Service Patrol	129	3.95%
Mass Highway	0	0.00%
DOT	45	1.38%
Hazmat	2	0.06%
DEM	4	0.12%
Connecticut DOT	1	0.03%
Construction	1	0.03%
Coast Guard	1	0.03%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	1	0.03%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	1624
# of VMS Messages	297
# of DMS Messages	1353
# of HAR Messages	825
# of Web Messages	2968

*Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.*

